

# NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

## FACT SHEET

(pursuant to NAC 445A.236)

### Permittee Name

Silver Springs Airport, L.L.C.  
P.O. Box 311  
Silver Springs, Nevada 89429

### Co-Permittee Lessee

Dayton Valley Turf, Inc.  
290 Kietzke Lane  
Reno, Nevada 89502

### Permit Number

NEV99017

### Location

The Silver Springs Airport effluent irrigation sites are located south of U.S. Highway 50, and west of central Silver Springs, Lyon County, Nevada in Township T18N, Range R24E, in Sections 23, 24, 25, and 26 MDB&M. Latitude: 39E24'00"N, Longitude: 119E15'00"W.

### General

The Silver Springs Water Reclamation Facility (SSWRF #NEV99012) supplies Tertiary treated, denitrified and disinfected effluent to the Silver Springs Airport area for landscape irrigation and adjacent agricultural field(s) for use via spray irrigation of turf grasses and alfalfa in accordance with an approved Effluent Management Plan and NDEP permit requirement.

The maximum discharge/flow of treated effluent in MGD delivered to the irrigated areas operated by Dayton Valley Turf, Inc. shall be limited by the consumptive use requirements for the irrigation of the approved plant materials grown in the agricultural field(s). This flow is monitored and reported. Due to the amount of land dedicated for current reuse, the permitted flow/discharge is set at 0.449 MGD for the 30-day average. Future growth in the area, increases in flow and or the expansion of irrigated lands would require NDEP approval. When the treated effluent is not pumped to the irrigation site for reuse, or if site conditions do not allow application, the effluent is stored in the effluent storage basin at the water reclamation facility. Irrigation is seasonal. Winter disposal is allowed along the airport runway in infiltration swales if WRF storage is near capacity.

Potential environmental impacts resulting from the irrigation of the Airport reuse site include the potential for elevated levels of chlorides, and dissolved solids to groundwaters of the State. Since the reclaimed water is denitrified, no impacts to groundwater from nitrate or nitrogen can occur from reuse irrigation. The effluent is disinfected, Class B NAC 445A.276 water so there are no

health concerns for the public or the staff. The water reclamation facility is permitted under a separate permit(#NEV99012). Application is not permitted during conditions of frozen ground, saturation or snow cover.

To reduce the potential for impact, the Permittee monitors flow onsite at the application areas, and reports monthly sampling analyses of the effluent conducted by the WRF to assure that concentrations of the listed parameters meet the required effluent standards of the permits.

The Dayton Valley Turf, Inc. company is a co-Permittee on this permit, which by lease is managing the effluent irrigation activities at the Silver Springs Airport property in accordance with the terms and conditions of the permit and the Effluent Management Plan. Reuse irrigation will be for alfalfa and turf grasses.

### **Tertiary Treatment Process for Effluent Reuse:**

The treated effluent is derived from domestic and commercial sewage (raw wastewater) which is discharged into a primary lagoon then is passed through a headworks area where screening removes grit and large particles. Following the headworks, the wastewater is routed to an extended aeration basin where the BioLac activated sludge process treats the wastewater using biological nutrient removal. The wastestream is next passed through a clarifier and then a sand filter before disinfection in a chlorine contact basin. The treated effluent is stored on site, then pumped to the Silver Springs Airport irrigation sites for reuse.

### **Flow**

The permitted daily maximum flow is based on consumptive use needs for the crop grown, the 30-Day average is 0.499 MGD

### **Receiving Water Characteristics**

Depth to groundwater near the reuse irrigation site is about 65 feet and is potable. A domestic water system serves Silver Springs and the water quality varies slightly from well to well.

Groundwater samples are monitored and analyzed quarterly from four monitor wells for the presence of nitrogen, nitrates, chlorides and total dissolved solids.

### **Procedures for Public Comment**

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwaters of the State of Nevada subject to the conditions contained within the reuse permit, is being sent to the **Dayton Courier and the Nevada Appeal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the Public Notice. The comment period can be extended at the

discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

### **Proposed Determination**

The Division has made the tentative determination to reissue the proposed permit for a five (5) year period.

### **Proposed Effluent Limitations, Schedule of Compliance and Special Conditions**

<u>PARAMETERS</u>	<u>DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	<u>30-day Ave.</u>	<u>Daily Max</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
FLOW:				
(Total)	0.600 MGD	M & R MGD <sup>1</sup>	Continuous	Flow Meter
Outfall 001 (Reuse)	0.449 MGD	M & R <sup>1</sup> MGD	Continuous	Flow Meter
BOD <sub>5</sub> : *	30 mg/l	45 mg/l	Monthly	Discrete
Total Suspended Solids: *	30 mg/l	45 mg/l	Monthly	Discrete
Fecal Coliform:*	2.2 CFU/100 ml	23 CFU/100 ml	Monthly	Discrete
Total Nitrogen-N: *	10 mg/l	M & R	Monthly	Discrete
Nitrate-N: *	M & R	M & R	Monthly	Discrete

**Notes: 1. Annual average, not daily maximum.**

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\* Monitoring data may be provided by the effluent supplier, but results must be reported by the Permittee in accordance with Part I.B.2.

M & R = Monitor and Report; MGD = million gallons per day; ml = milliliters; mg/l = milligrams per liter

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**Monitoring Well Sampling Requirements**

**MONITORING WELL #3 & 3R (DOWN GRADIENT) Monitoring**

	<b><u>Frequency</u></b>
TOTAL DISSOLVED SOLIDS: Monitor and Report	Quarterly
NITRATE as N: See Part I.A.12, 10 mg/l	Quarterly
CHLORIDE: Monitor and Report	Quarterly
GROUNDWATER ELEVATION: Monitor and Report	Quarterly
DEPTH TO GROUNDWATER: Monitor and Report	Quarterly

**Schedule of Compliance, Special conditions:**

1. Revisions to the approved Operations and Maintenance Manual (O & M) shall be submitted no later than 90 days of permit issuance.
2. The groundwater monitoring well shall be locked and capped to prevent public access and tampering. Each well shall be identified by a number.

**Rationale for Permit Requirements**

Effluent monitoring is required to assure the level of treatment being provided and to document quantities of effluent used for irrigation.

Groundwater monitoring is required to ensure that operations of the facility do not degrade groundwaters of the State.

Prepared by: Icyl C. Mulligan  
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July, 2008